



**University of Idaho**

College of Agricultural  
and Life Sciences

# **CALDWELL PROCEEDS AND CAFE EXPERIMENTAL FARM**

Presentation to Idaho State Board of  
Land Commissioners  
September 20th, 2022

# IDAHO CAFE

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## IdahoCAFE

Center for Agriculture, Food and the Environment

### A REGIONAL MODEL

Experimental Farm / Research Dairy

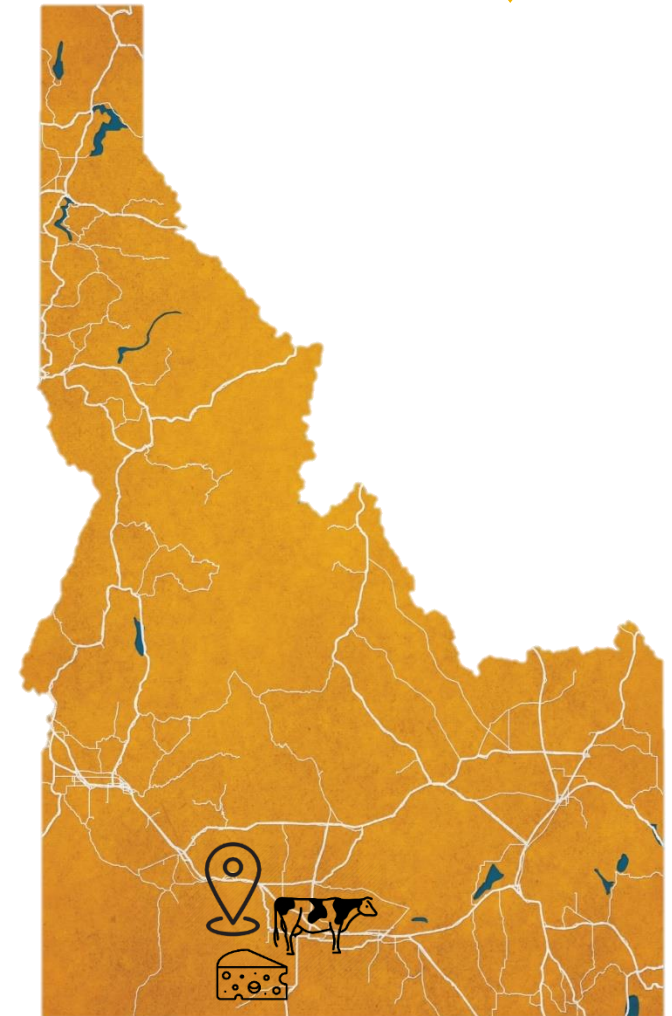
Rupert (*Minidoka County*)

Discovery Center, classrooms, labs, faculty offices

Crossroads I-84/Hwy93 (*Jerome County*)

Food processing pilot plant, workforce training/edu facility

CSI Campus (*Twin Falls County*)



# IDAHO CAFE



## IdahoCAFE

Center for Agriculture, Food and the Environment

- U of I has a need for an experimental farm to better serve Idaho agriculture
- Idaho dairy industry is #3 in the nation
- #1 agricultural commodity in Idaho
- With the close and sale of the Caldwell experimental farm, CALS only has one off-campus farm focused on large animals
- CAFE is critical to the continued delivery of the WIMU Veterinary Medicine program

# RESEARCH AT CAFE

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- Representative of the **size of a modern dairy** (cows and acres) to conduct experiments relevant for Idaho producers
- Located where the dairy industry thrives
- Integrates **animal and agronomy research** on the same site through forage production & nutrient management
- Develop waste management systems to **create byproducts** like fertilizers for crops

# RESEARCH AT CAFE

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- Develop strategies to **mitigate greenhouse gas emissions** from animals, housing areas, waste systems, and in-field applications, thereby advancing the dairy industry's **nationwide net zero initiative**
- Incorporate **sensors** and **artificial intelligence** to appropriately apply nutrients, including water, to crops and aid in animal well-being
- Support the **economic viability** of agriculture through sustainable crop rotational patterns focused on maintaining healthy soil and efficient use of water

# PROPOSAL FRAMEWORK

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## Purchase and Sale Agreement

- UI proposes to sell approximately 640 acres of land in Rupert to the Endowment at the appraised value of \$6M
- Purchase price to come from funds in the Land Bank generated from 2021 sale of Endowment property in Canyon County
- This land will encompass the entirety of the Operating Dairy

## Experimental Farm Operating Agreement

- Build-out of an Operating Dairy
- Operations
- Liquidation at end of agreement

# PROPOSAL FRAMEWORK

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## Build-out of the Operating Dairy

1. Operating Agreement authorizes UI to construct Buildings/Improvements for the Operating Dairy
2. Land Bank Funds up to \$17.25M will be applied to Buildings/Improvements as follows:
  - a) Site Preparation: UI will use \$6M from sale of property to the Endowment plus additional internal UI funds to complete
  - b) Endowment Buildings/Improvements with Land Bank Funds:
    - Construction of the Milking Barn and Parlor by UI for the Endowment with construction funded using \$17.25M balance

# PROPOSAL FRAMEWORK

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Build-out of the Operating Dairy (cont'd)

- c. UI Additional Buildings/Improvements (UI Funds)  
Operating Agreement allows UI to build additional Buildings/Improvements on Endowment Lands after approval. There are two anticipated categories:
1. Operating Dairy. Those buildings in addition to Endowment Buildings/Improvements necessary to complete an operational dairy
  2. Additional Buildings/Improvements. UI may construct and fund additional Buildings / Improvements for use in conjunction with the Operating Dairy
- ❖ UI retains ownership of these buildings/fixtures



# PROPOSAL FRAMEWORK

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## Operations Post Build-out

- Land Board designates University of Idaho as manager, occupant, and sole operator to develop and operate the experimental farm and research dairy in accordance with the Morrill Act
- UI will be responsible for all operations and maintenance of the Operating Dairy, including the land and all Buildings/Improvements

# PROPOSAL FRAMEWORK

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## Liquidation of Dairy at the End of the Agreement

1. Endowment Land and Buildings/Improvements/Fixtures
  - a. Proceeds from sale, including appreciation in value, return to the endowment
2. UI Buildings/Improvements/Fixtures
  - a. Sold contemporaneously with the Endowment lands/buildings/fixtures; proceeds are paid by the purchaser to UI
3. Format For Sale of the Combined Assets
  - a. Entire Operating Dairy (Endowment & UI assets) appraised at highest and best use;
  - b. Endowment Land with Buildings/Improvements sold at auction; all proceeds go to Endowment
  - c. UI Buildings/Improvements given separate value to determine purchase price for purchaser

# FINANCIAL ANALYSIS

## Sources of Funds

Source:	Amount:
State of Idaho	\$ 10,000,000
State of Idaho Land Board - Caldwell Proceeds	17,250,000
Federal (ARS)	1,000,000
Federal (ARS) - expected \$6mm rec'd in 2024	6,000,000
CALS	2,290,000
CALS - Phases 1 and 2 pledges	2,170,000
Central	1,400,000
Additional Fundraising Goal	3,202,007
Land Board Purchasing Original Farm Land	6,000,000
<b>Total Sources of Funds:</b>	<b>\$ 49,312,007</b>

# FINANCIAL ANALYSIS

## Uses of Funds

<b><u>Capital Expenditures</u></b>		
Improvements - construction bid	\$ 29,962,845	
Machinery & Equipment	1,999,102	
Buildings & Offices	11,762,590	
Rolling Stock	1,290,000	
<b>Capital Expenditures:</b>		<b>\$ 45,014,537</b>
<b><u>Initial Feed Purchases</u></b>		
Forages	\$1,467,500	
Grain	345,970	
<b>Initial Feed Purchases:</b>		<b>\$1,813,470</b>
<b><u>Original Purchase of Herd</u></b>		
# Milking Cows	1,200	
% Dry Cows	15%	
# Dry Cows	180	
\$/Milking Cow	\$1,800	
\$/Dry Cow	\$1,800	
Milking Cow Purchases	\$2,160,000	
Dry Cow Purchases	324,000	
<b>Original Herd Value:</b>		<b>\$2,484,000</b>
<b>Total Uses of Funds:</b>		<b>\$ 49,312,007</b>

# FINANCIAL ANALYSIS

## Return on Investment

<b>Initial Investment Amount - University-Controlled Funds</b>	\$ (45,014,537)			
		<b>Change in Debt</b>	<b>Land Appreciation</b>	<b>Return in Year:</b>
Cash Flow, Year 1:	\$ -	\$ (1,627,350)		\$(1,627,350)
Cash Flow, Year 2:	-	2,815,750		2,815,750
Cash Flow, Year 3:	2,301,282	452,306		2,753,588
Cash Flow, Year 4:	5,079,845	-		5,079,845
Cash Flow, Year 5:	5,226,585	-		5,226,585
Cash Flow, Year 6:	5,177,059	-		5,177,059
Cash Flow, Year 7:	4,735,601	-		4,735,601
Cash Flow, Year 8:	5,292,321	-		5,292,321
Balance Sheet Equity - End of Year 8 Less Cash, Plus A/D factor:			\$ 1,600,620	\$46,629,459
<b>Internal Rate of Return - Cash:</b>	<b>7.20%</b>			

# FINANCIAL ANALYSIS

## Return to Beneficiary

	Investment Fund	CAFE
<b>NPV of 8 years, 4% discount rate</b>		
\$23.25M invested in endowment	\$ 5,922,696	\$ -
Additional grant revenues	-	11,631,960
Research trial fee revenues	-	9,887,166
Enrollment revenues	-	2,180,993
<b>Total Return per Year</b>	<b>\$ 5,922,696</b>	<b>\$ 23,700,119</b>

## Return to Endowment

NPV of 8 years, 4% discount rate	CAFE
Land Appreciation (3% growth per year)	\$ 1,338,903
<b>Total Return per Year</b>	<b>\$ 1,338,903</b>

## Total 8-year NPV CAFE Return

**\$25,039,022**

# ANTICIPATED **TIMELINE**

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- UI Regents Approval October 20, 2022
- 640 acres closing by December 20, 2022
- CAFE Phase 1 construction to bid in December 2022 – January 2023
- Phase 1 construction completed by end of 2024
- Phase 2 construction completed by February 2026

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**QUESTIONS?**



# Exhibit B – CAFE Facilities

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## Buildings/Improvements

### Phase 1 Construction (2023)

- All Excavation / Site Preparation
- B. Milking Parlor
- L. Reuse Water & Flush Water Tank
- U. Trash Enclosure
- W. Well House Building

### Phase 2 Construction (2024)

- A. Office Building
- C. Calving & Research Barn
- D. Commodity Barn
- E. Manure Pump Station
- F. Manure Processing Building
- G. Settling Pond Splitter Box
- G1. Settling Pond 1
- G2. Settling Pond 2
- K1. Upper Storage Pond
- K2. Lower Storage Pond
- M. Shade Structures
- P. Milk Truck Scale
- R. Loading Ramp
- S. Fueling Station
- T. Emission Tanks

### Endowment Buildings/ Improvements

- B. Milking Parlor (~\$17M)

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**ARCHITECTURAL & ENGINEERING SERVICES****PROJECT BUDGET MODEL****Project: CAFE Research Dairy, Rupert, Idaho DPW 18-257**

Scope of Work: Milking Parlor

UI Project Number: CP200017

Capital Construction Index: 674783

Date: 2 September, 2022

PROJECTED EXPENDITURES		Est. Expense Item
<b>FEES:</b>		
Consulting A/E Services		1,366,256
Reimbursables Allowance, A/E		69,000
Design Phase Consulting CM/GC Services		98,336
Reimbursables Allowance, CM/GC		10,800
Project Administrative Support		
Advertisement, A/E Services		74
Advertisement, CM/GC		76
RFQ, A/E		64
RFQ, CM/GC		64
DOPL Plan Check Fee		15,100
Detail Site Survey (Included in Keller design services contract)		0
Geotechnical Services (Included in land purchase agreement)		0
Construction Materials Testing (Allowance)		30,000
Testing and Balancing (Allowance)		20,000
Commissioning (Allowance)		25,000
Soils Testing/Compaction (Allowance)		40,000
	<b>Sub-Total Fees Category</b>	<b>1,674,770</b>

<b>CONSTRUCTION, CONTRACTOR:</b>		
Milk Parlor, construction		11,895,673
	Sub-Total	11,895,673
Construction Contingency @ 10%		1,189,567
DOPL Building Permit		37,750
	<b>Sub-Total Construction, Contractor Category</b>	<b>13,122,990</b>
<b>CONSTRUCTION OWNER:</b>		
UI Facilities (Support)		
UI Shops Support (Submittal Review, Allowance)		5,000
Fixed, Installed Equipment		
Rotary Milker, DeLaval/Total Dairy Solutions		1,999,102
Main Electrical Service (Idaho Power, Allowance)		100,000
Telephone Infrastructure (Allowance)		80,000
Data Connection to the Site (Allowance)		80,000
Audio/Visual Systems (Allowance)		20,000
Computer Cabling/Electronic Switches/TIP Plates (Allowance)		25,000
	<b>Sub-Total Construction, Owner, Category</b>	<b>2,309,102</b>

<b>FURNISHINGS/FIXTURES:</b>		
	Lump Sum "Owner Cost & FFE" Estimate	
	Fixed Equipment	
	Furnishings	20,000
	Artwork / Graphics	
	Public Art Program (@ 1.5% of Const Cost)	
	Interior Architectural ID and Wayfinding Signage	5,000
	Exterior Architectural Identity Signage	7,500
	Donor Recognition Signage	5,000
	Non-Fixed Equipment	
	<b>Sub-Total Furnishing/Fixtures Category</b>	<b>37,500</b>
<b>PROJECT SUB-TOTALS:</b>		
	<b>Sub-Total Project Category</b>	<b>17,144,362</b>
<b>PROJECT CONTINGENCY:</b>		
	Project Contingency Budgeted (2.5%)	428,609
<b>CAPITAL PROJECT TOTAL, ROUNDED</b>		<b>\$ 17,572,971</b>

# EXPERIMENTAL FARM IN RUPERT

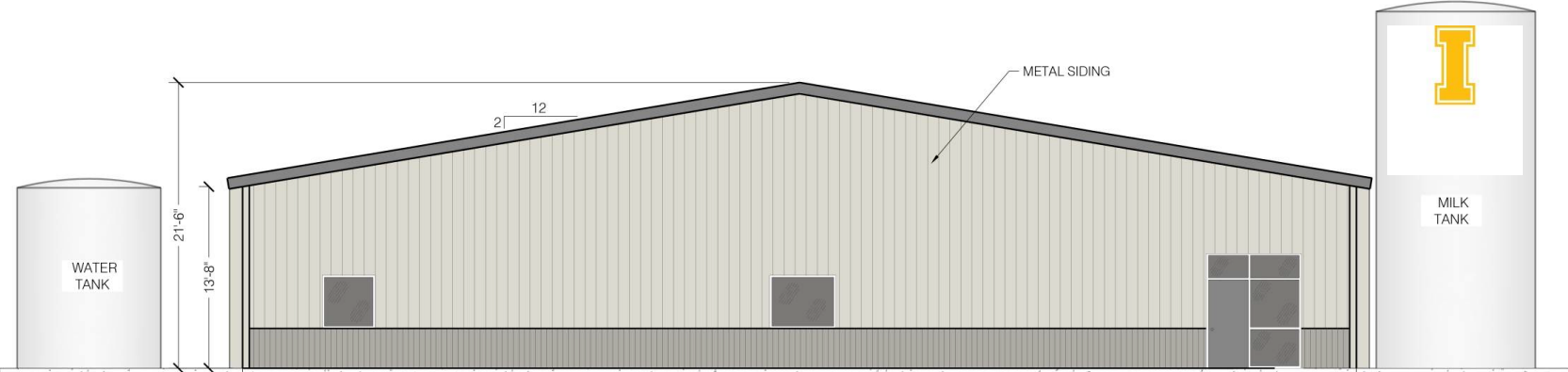
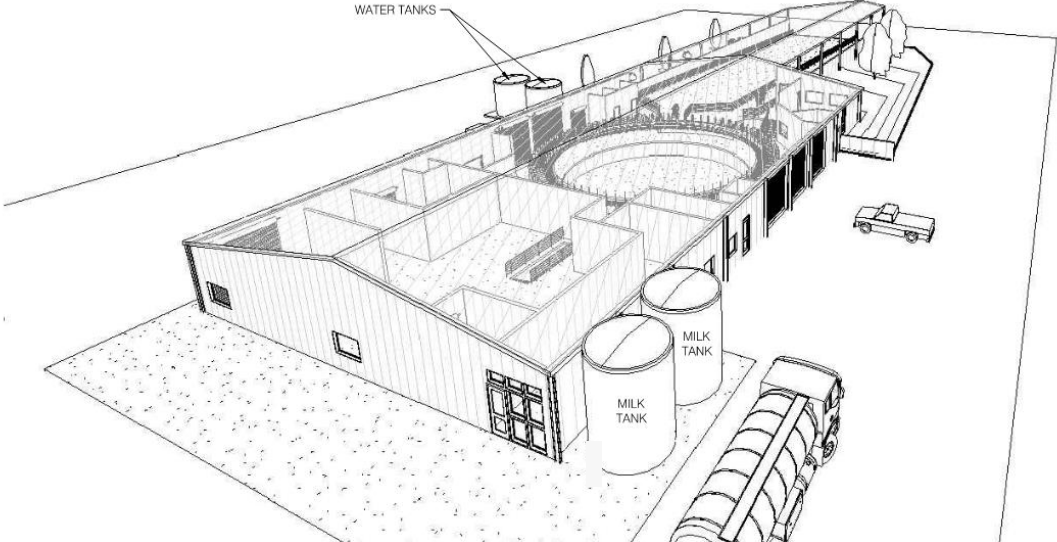


University of  
Idaho

Idaho  
Dairymen's  
Association

640 acres purchased in March 2019

# STATE OF THE ART MILK BARN (PH 1)





# STATE OF THE ART MILKING SYSTEM (PH 1)

